CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter discusses the environmental consequences of selection and implementation of each of the alternatives described in Chapter 2. The discussion for each alternative identifies impacts on each resource component of the affected environment described in Chapter 3. The identified environmental consequences provide the basis for selection of a proposed RMP in conjunction with public input and coordination with State and local governments, other Federal agencies, and Indian tribes.

EFFECTS OF THE ALTERNATIVES

Alternative A

Fire Management

Average wildfire numbers and size from recent years would be expected to continue in Alternative A; 81 fires per year and 34,000 acres burned per year. No increasing or decreasing trend would be expected over the long term.

Wildlife

Under this alternative, 87 tracts now under the Isolated Tract HMP would remain in Federal ownership and would continue to be managed for wildlife habitat protection.

Where specific numbers of animals are listed below, we anticipate that 50 percent of the change would occur within 5 years, and the remaining 50

percent within 20 years. Refer to Appendix C "Methodology" for an explanation of how the numbers were derived.

Bliss Rapids Snail (Candidate Endangered). Dewatering or creation of slack water would destroy populations of this species if these actions occurred. The future extent of these actions is unpredictable.

Ferruginous Hawk (Candidate Threatened). A population increase could be expected as a result of the placement of artificial nest structures.

Swainson's Hawk (Candidate Threatened). An unknown population increase could be expected, as all 87 wildlife tracts would be maintained in habitat suitable for this species. Artificial or natural nest sites could potentially be provided on any or all of these tracts. By maintaining a large number and variety of these tracts, chances of success in attracting breeding Swainson's hawks are increased.

Burrowing Owl (Sensitive). A net gain of 14 breeding pairs could be expected as a result of providing artificial nest structures on some of the 87 Isolated Tracts.

Shoshone Sculpin *(Candidate Endangered)*. The populations of this species and its habitat in Box Canyon and Blue Heart Springs are currently exposed to three threatening actions--sedimentation from return irrigation flow, soil disturbance within Box Canyon, and most importantly, dewatering. The future extent of these actions is unpredictable.

Ring-Necked Pheasant. A net increase of 5,200 birds could be expected mainly as a result of brush protection and seedings on Isolated Tracts. The population would increase as a result of better winter cover and also improved nesting cover.

Gray Partridge (Hungarian Partridge). A net increase of 870 birds could be expected for the same reasons as those cited for pheasants.

Sage Grouse. No change.

Pronghorn. A net increase of 26 animals could be expected mainly due to seedings, brush protection, and brush enhancement on certain Isolated Tracts. These tracts would be of value as winter range and as fawning cover.

Mule Deer. A net increase of 17 animals could expected due to seedings and brush cover on Isolated Tracts that would be of value to resident deer and some wintering animals.

Hybrid Cutthroat/Rainbow Trout. Currently, sedimentation in the spawning habitat of this unique population is an identified negative effect. However, other unforeseen negative effects may arise in the future.

Non-Game Species. A net increase of 1,900 pairs of breeding birds could be expected primarily through increased habitat quality and diversity on Isolated Tracts. A small loss of breeding pairs would occur on transfer lands.

Livestock Forage

Grazing Management. Under this alternative, the stocking rate would be *97,562* AUMs. This is a decrease of *51,573* (35 percent) from the active preference of 149,135 AUMs.

Land transfer would result in a loss of *330* AUMs from the five-year average actual use of 97,892 AUMs. Four allotments would be entirely eliminated by land transfer.

Conversion of sheep AUMs to cattle AUMs would take place on four allotments with existing AMPs which specifically address conversions. This would amount to only 4,982 AUMs converted from sheep use to cattle use. As a result, the amount of nonuse would increase significantly if the sheep industry continues to decline.

See Table D-3 in Appendix D for allotment-specific details.

Vegetation. Vegetation trend in the planning area is expected to be controlled by the influences of cheatgrass. Long-term (27 years) photo points, permanent photo trend plots, and apparent trend observations all provide supportive evidence for the stability of cheatgrass-dominated vegetation types. Downward trends are expected to continue on problem areas and upward trends are expected on areas dominated by perennial vegetation. Stable trends are

expected on the remainder of the planning area. Below is a summary of the expected trends for this alternative.

Upward	21 percent
Stable	74 percent
Downward	5 percent

Range condition would continue to decline on downward trend areas due to seasonal grazing and livestock distribution problems resulting from lack of water and rough, rocky terrain. Continued improvement should occur in upward trend areas, but no change in condition is expected on areas with stable trend. The dampening effects of cheatgrass on successional change would make plant community changes subtle and changes of condition slow to occur (Robertson and Pearse 1945; Hironaka and Tisdale 1963; Young, Evans, and Major 1972). Virtually all of the poor condition range lacks sufficient native species to provide an adequate seed source for an improvement in condition. Continued high fire frequencies and competition from cheatgrass are expected to prevent condition class changes in this alternative. Present condition classes are:

Good	2 percent
Fair	8 percent
Poor	70 percent
Seeded	20 percent

Refer to Appendix D, "Projecting Ecological Condition and Trend" for an explanation of how the projections above were derived.

No ACEC designations would be made under this alternative. Proposed ACECs would not be lost to land transfer, but special management for protection of these tracts from disturbance would not be implemented either. Both the Sub-station Tract and the Silver Sage Playa would be susceptible to disturbances, especially burning.

Threatened and Endangered Plants. No effects on Threatened or Endangered plants are expected to occur under this alternative.

Lands

Transfer of 3,458 acres could occur under this alternative through public sales, exchanges, or R&PPs (refer to Table 2-2). No transfer of lands currently under Desert Land Act and Carey Act application would occur. This would result in adverse actions being taken on 5,570 acres of land under Desert Land Entry application and 38,420 acres of land under Carey Act application.

The transfer of public lands has the potential for significant adverse impacts on other resource and public values. The loss of public land base

would eliminate the availability of these lands for future use by the public and the Federal government. It is assumed that the lands would be put to a single use (housing, agriculture, etc.) and the multiple use values would be lost or diminished. Legal, existing uses would be protected and mineral rights would be reserved to the government in most cases.

Transfers could reduce problem management areas for BLM, protect private land investments and values, and add to the local tax base. *Transfers* would be selected which better consolidate land ownership patterns, thereby improving management.

The transfer of public lands would affect each resource to varying degrees. The overall impacts are somewhat proportional to the acreages involved and are discussed in the environmental consequences narrative for each resource.

Actions for leases, easements, permits, and rights-of-way would continue to be allowed. Mitigation of any adverse effects to the environment would be included in the use authorization.

Lands activities would be limited to those not involving motor vehicle use on 450 acres. For example, a right-of-way application might be denied or modified because motor vehicles could not be used to install or maintain developments.

Withdrawal review activities would occur in accordance with a specified schedule through 1991 (see Appendix E). As a result of this review, all lands now withdrawn by formal withdrawal or 'de facto' withdrawals (lands classifications) which prohibit some lands and minerals actions, could be opened to entry, settlement, or location under various land and mineral laws. Nearly all lands within the planning area are now encumbered, to some degree, by withdrawals and/or classifications. The removal of the withdrawal status and segregations provided for by the classifications would not, in itself, cause any impacts other than the administrative actions necessary to respond to filings for various lands uses. The retention of withdrawals and/or classifications would continue the restriction of certain entries and uses of the affected lands.

Existing, recognized (legal) uses of public lands transferred to private ownership would be protected. These protected uses include rights-of-way and public access and, in the case of sales, the privilege of continued grazing for the period specified in the permit or lease in existence at the time of the sale. Areas containing resource values such as wetland/riparian habitat and flood plains would be protected through patent reservations or encumbrances. Minerals would normally be reserved to the United States. In an exchange, mineral rights would be exchanged when the mineral rights on public lands and non-public are comparable. Local government needs, primarily for rights-of-way and sanitary landfills, would continue to be addressed on a case-by-case basis. Over 1,100 acres have use authorizations or are under consideration for allowance of sanitary landfill development. Lands needed for recreation and public purpose uses would be leased subject to an approved development and management plan that takes the needs of the populace and environmental protection into consideration. Lands used for sanitary landfills would not be available to the public for other uses until the site's usefulness for landfill purposes

is exhausted. At that time, the lands would be rehabilitated for return to multiple use management or developed for some other purpose consistent with the Recreation and Public Purposes Act and the site capability.

The settlement of unauthorized use on public lands would result in payment of fair market value for past use and provide for rehabilitation of degraded areas. When the lands are retained in Federal ownership, continued use may be allowed under FLPMA authorization or a Sikes Act agreement for wildlife habitat improvement and maintenance.

Wilderness

Shale Butte WSA (57-2). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Although the entire WSA is accessible to trailbike use and, except for a number of very rough areas, four-wheel drive vehicles, recreational ORV use is presently low (less than 1,000 visits/year) in this unit. Long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in the WSA.

Livestock management would require the occasional use of vehicles on ways inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity inside the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. Since fires occur frequently (one every five years), there is a fair chance that over the long term some damage to the wilderness resource due to fire suppression activities would occur. Fires would continue to create conditions that are unfavorable to vegetation that is representative of the potential natural vegetation for this area (Sagebrush-Steppe).

Sand Butte WSA (57-8). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Although the entire WSA is accessible to trailbike use, and in a few areas close to existing roads and ways accessible to four-wheel drive vehicles, recreational ORV use is presently low (less than 1,000 visits/year) in this unit. Long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in the WSA.

Livestock management will require the occasional use of vehicles on ways and cherrystem roads inside the WSA for various management activities. This use will have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity inside the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. Some portions of the WSA have fires fairly frequently (three times in the last 25 years), although most of the WSA has burned at a much lower frequency. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness.

Raven's Eye WSA (57-10). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining and fire suppression could have adverse impacts on wilderness resources.

Approximately 47 percent of the WSA is accessible to trailbike use. A much smaller area, close to existing roads and ways, is accessible to four-wheel drive vehicles. Although recreational ORV use is presently low (less than 1,000 visits/year) in this unit, long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in those portions of the WSA that are accessible.

Livestock management would require the occasional use of vehicles on ways and cherrystem roads inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity on 47 percent of the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value

of naturalness. The remainder of the WSA is so barren of vegetation that fires of more than an acre or two rarely occur. In addition, that part of the WSA is so rugged that fire suppression using heavy equipment would not be attempted. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness in those portions of the WSA accessible to heavy equipment.

Little Deer WSA (57-11). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Approximately 38 percent of the WSA is accessible to trailbike use. A much smaller area close to existing roads and ways is accessible to four-wheel drive vehicles. Although recreational ORV use is presently low (less than 1,000 visits/year) in this unit, long-term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in those portions of the WSA that are accessible.

Livestock management would require the occasional use of vehicles on ways and cherrystem roads inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity on 38 percent of the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. The remainder of the WSA is so barren of vegetation that fires of more than an acre or two rarely occur. In addition, that part of the WSA is so rugged that fire suppression using heavy equipment would not be attempted. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness in those portions of the WSA accessible to heavy equipment.

Bear Den Butte WSA (57-14). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Approximately 56 percent of the WSA is accessible to trailbike use. A much smaller area close to existing roads and ways accessible to four-wheel drive vehicles. Although recreational ORV use is presently low (less-than 1,000 visits/year) in this unit, long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in those portions of the WSA that are accessible.

Livestock management would require the occasional use of vehicles on ways inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity on 56 percent of the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. The remainder of the WSA is so barren of vegetation that fires of more than an acre or two rarely occur. In addition, that part of the WSA is so rugged that fire suppression using heavy equipment would not be attempted. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness in those portions of the WSA accessible to heavy equipment.

Shoshone WSA (59-7). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. The only activity that would have an adverse impact on wilderness values is mining. The WSA is so rugged that it is not used by other activities such as livestock management, recreational ORV use, and fire suppression.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Natural History

None of the areas of geologic interest (AGI) would have any special management. Improved access to AGI would accelerate vandalism and other man-caused agents of deterioration in four AGI covering *10,254* acres. Improved access to six AGI would increase the number of people exposed to natural hazards.